

**BEFORE THE  
PUBLIC SERVICE COMMISSION OF WISCONSIN**

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Quadrennial Planning Process III

Docket No.05 -FE-101

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**COMMENTS OF THE CITIZENS UTILITY BOARD ON THE COMMISSION'S PLANNING  
PROCESS MEMORANDUM**

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**I. Introduction**

Pursuant to the request for comments on the Commission draft memorandum (Draft memo) concerning the Quadrennial Planning Process III issued on March 22, 2018 (PSC REF#: 339941), the Citizens Utility Board (CUB) submits the following comments. CUB's comments generally follow the order of the questions listed in the Draft Memo.

Overall, CUB submits that the Focus on Energy program (Focus) has been performing well and has provided significant benefits for customers of the state's investor-owned utilities. However, there is always room for improvement. In these comments, CUB offers several recommendations to help ensure that Focus continues to provide benefits in excess of its costs. In CUB's view, the importance of Focus in the 2019-2022 quadrennium is elevated in light of recent significant generating capacity additions by Wisconsin utilities, coupled with the publicly announced plans for further generation expansion by a number of Wisconsin utilities, as well as sizeable transmission line projects such as the proposed Cardinal Hickory Creek line. The foundational aim of energy efficiency and conservation programs such as Focus is to reduce utility and customer costs both by reducing production costs in the short term, and by avoiding future capital additions in the long term. As it appears that Wisconsin is poised to enter a new phase of significant capital expenditure by its utilities, CUB urges the Commission to consider how best to position the Focus program so as to reduce or avoid costly capacity additions that will impact customers for generations. Moreover, as the Commission proceeds with its parallel work on grid

modernization, CUB asks that the Commission consider how Focus can be leveraged as a tool within that context for achieving the maximum achievable level of customer savings.

## **II. Comments**

### **Priorities**

#### *Emphasis Between Energy and Demand*

CUB supports Alternative Two: Establish Focus goals with an equal emphasis on energy and demand savings.

As noted above, Focus has performed well as a tool for enabling conservation and energy efficiency, to the benefit of all Wisconsin utility customers. However, CUB is concerned that a wave of substantial utility investment is looming over the horizon, much of which is related to capacity additions, whether generation or transmission. Based solely on the statutory definition of an energy efficiency program and the policy goal of service equity, CUB believes it may not be necessary to adjust the relative emphasis between energy and demand at this time. While energy savings are given greater emphasis than demand savings under the current approach, demand savings are still achieved by Focus programs and the utilities have the opportunity for additional demand savings through load management programs.

That being said, CUB believes that it may be appropriate to raise the emphasis on demand savings so as to be given a weight equal to energy savings. It is hoped that in doing so, any future capacity-related capital additions can be reduced or avoided. However, this recommendation comes with some caveats.

An increase in emphasis on demand savings must be accompanied by a reevaluation of the peak demand periods against which demand savings are valued. To consider only summer peak periods neglects the fact that many Wisconsin utilities experience significant secondary peaks during the winter months. Moreover, capacity adequacy is an operational concern in all twelve months of the year, particularly when one considers the cost of baseload and intermediate generating facilities, which are

required year-round, and have a significantly higher per-unit of capacity cost than the peaking unit used to value demand savings.

A shift to an equal emphasis on energy and demand savings for Focus, CUB believes, must also be done within a wholistic framework, wherein all aspects of utility regulation are evaluated as to whether or not they all work towards achieving energy *and* demand reductions. For example, while statute prohibits Focus from implementing load control programs, reserving them as the exclusive purview of the utilities, most Wisconsin utilities have significantly reduced or eliminated their load control product offerings. Additionally, as Focus programs are necessarily focused on the consumer, that is to say the distribution end of the utility grid, CUB believes that it is necessary to consider whether current rate structures, and other utility product and service offerings, are conducive to achieving both demand and energy savings equally. For example, recent shifts in small customer rate design away from volumetric charges towards fixed charges, reduces incentives to reduce consumption. Additionally, broader use of well-designed time of use rates or other innovative rate designs, coupled with enabling technologies, may need to be more aggressively pursued in order to maximize customer savings and avoid future, and possibly unnecessary capital costs.

If the Commission is willing to take the necessary steps to treat Focus as one part of the overall regulatory ratemaking framework, including adopting the suggested alternatives described below, CUB believes that it would be appropriate to increase the emphasis on demand savings to equal that on energy savings. Absent that, CUB suggests that continuing to emphasize energy use savings is appropriate.

#### *Emphasis of Business and Residential*

CUB supports Alternative One: Approximately 60 percent of Focus funding shall be allocated to business programs ratepayers and 40 percent to residential programs

CUB does not find a compelling reason to shift the emphasis of funding for business and residential programs. While the business as usual (BAU) achievable residential savings potential

suggested in the *Focus on Energy 2016 Energy Efficiency Potential Study* is slightly below the 40 percent of Focus funding currently allocated to the residential sector, CUB believes that there is still adequate cost-effective savings potential in the residential sector allow for the spending of 40 percent of program funds achieving residential savings. As noted in the Draft Memo, maintenance of the current allocation between business and residential programs would allow Focus to capture cost-effective residential savings from newer technologies such as light emitting diode (LED) light bulbs, home appliances, furnaces, and smart thermostats. As suggested by the Potential Study, this may allow residential programs to contribute a more significant share of overall savings than in recent years. Additionally, CUB believes that it is also appropriate to retain the current funding split in order to preserve service equity between residential and business programs.

Should the Commission choose to modify the allocation of Focus funding between business and residential programs, CUB believes that it would be appropriate for the Commission to require that the allocation of Wisconsin Act 141 Expense, that is to say the collection of Focus funding from customers through rates, be adjusted so as to align with the new funding ratio.

#### *Balance Between Resource Acquisition and Market Transformation*

CUB supports Alternative Three: Performance metrics and budgets that reflect specific market development and transformation goals, in addition to specific resource acquisition goals, should be established. The budget should be twice the current efforts or approximately \$5 million. Direct the EWG to report back to the Commission by November 1, 2018, on reasonable metrics for measuring progress on the areas chosen during the quadrennium.

Given the present level of overall Focus funding, the re-allocation of resources that would be needed in order to provide equal emphasis to both resource acquisition and market transformation, may not be appropriate at this time. That being said, CUB believes that it is appropriate to begin increasing the emphasis on longer-term market transformation efforts, relative to past efforts, and to move forward with

specific market development and transformation goals, in addition to specific resource acquisition goals. While CUB has no strong opinion whether the \$5 million budget proposed under Alternative Three for market transformation is the exact appropriate amount, we do not find it to be unreasonable.

## **Cost-Effectiveness of Programs**

### *Cost-Effectiveness Test*

CUB supports Alternative One: Focus Programs shall meet a Modified TRC Test of cost-effectiveness.

CUB believes that it is appropriate to continue the use of the Modified TRC as the primary cost-effectiveness test. As noted in the Draft Memo, TRC tests takes a balanced approach in considering the benefits and cost to both utilities and customers. The current use of the Modified TRC builds on this general framework, incorporating benefits from reductions in criteria pollutants such as sulfur oxides and nitrogen oxides, as well as carbon dioxide. Inclusion of these additional avoided cost benefits in the primary cost-effectiveness test is appropriate not only because they reflect societal benefits produced by the Focus program, but also because the costs associated controlling with nitrogen and sulfur oxide emissions represent very real, and easily quantifiable financial costs to utilities and their customers.

While CUB recognizes that Focus likely generates significant economic and societal benefits beyond the scope of the Modified TRC, the difficulty associated with quantifying these benefits with a high degree of certainty diminishes the attractiveness of the Expanded TRC and Societal Test, relative to the Expanded TRC. However, should the Commission find it appropriate to begin to recognize these additional benefits, such as the impact of Focus on job growth and economic development, CUB would not object to the use of either the Modified TRC or Societal Test as the primary cost-effectiveness test.

While it may be appropriate to continue to use of the RIM test for information purposes, CUB opposes the use of the Ratepayer Impact (RIM) Test as the primary cost-effectiveness test for the Focus

program. CUB finds believes the consideration of lost utility revenues in evaluating cost-effectiveness to be anathema to the core purpose of energy efficiency and conservation programs such as Focus, which is to provide incentives for more efficient use of the utility's system so as to reduce overall utility costs in the long term. If concerns exist regarding the potential for negative impacts to non-participating customers, CUB believes it would be more appropriate to consider an increase in overall Focus funding so as to expand the reach of the program to a greater number of customers.

### *Informational Tests*

CUB supports Alternative One: Depending upon the primary cost-effective test selected, one or more of the following shall be used as a secondary test for informational purposes:

c. Expanded TRC Test

d. Utility Test

f. RIM Test

CUB believes that the Expanded TRC, Utility Test, and RIM Test should continue to be used for information purposes, with the Expanded TRC allowing for the recognition, as best as possible, of the economic benefits of the programs; the Utility Test to informing program design (specifically incentive levels); and the RIM Test to reflect likely interest in program rate impacts.

### *Avoided Costs – Electric Avoided Energy Costs*

CUB supports a modified version of Alternative Two: For the purposes of evaluating Focus, avoided electric energy costs shall be based on a forecasted LMP plus cost adders for transmission, distribution, and baseload and intermediate generation capacity. The EWG shall review available data for determining the appropriate value of an adder and report its findings and recommendations to the Commission by November 1, 2018.

While CUB believes that forecasted average Locational Marginal Price (LMP) is a reasonable foundation for the avoided cost of energy, we believe that the use of LMP alone inadequately captures the avoided cost of transmission and distribution as these utility, and ultimately customer, costs do not flow through the market in which LMPs are set, but rather are recovered through regulated utility rates. As noted previously, long-term infrastructure costs associated with transmission and distribution are significant contributors to overall utility costs and are poised to grow if measures are not taken to incentivize changes in customer behavior that would alleviate the need for costly future additions in infrastructure spending, particularly on transmission. As such, CUB believes that the electric avoided energy costs should include a transmission and distribution adder.

Similarly, the use of LMP alone as the avoided cost of energy fails to capture the significant long-term capital costs of baseload and intermediate generating facilities. While the marginal cost of production associated with these facilities are captured in the LMP, the capital cost of these plants flow outside of the market, recovered through the utilities' regulated rate base. Moreover, the per-megawatt (MW) cost of baseload and intermediate generating facilities vastly exceeds that of peaking facilities. As such, the electric avoided capacity cost, which is based on the cost of a peaker, is inadequate for the purposes of capturing baseload and intermediate generator avoided cost benefits.

As noted previously, a number of Wisconsin utilities have either recently made additions to their generation fleet or have signaled an intention to embark on a new round of capital expenditures in order to add generating capacity. It is critical that the avoided capital cost of baseload and intermediate facilities be included in the electric avoided energy cost in order to fully recognize the value the Focus program provides in helping to avoid these significant and long-lasting drivers of utility cost and rates.

CUB agrees with the Draft memo that it would be appropriate for the Commission to direct the Evaluation Work Group (EWG) to develop appropriate adder values.

### *Avoided Electric Capacity Costs*

Should the Commission adopt the alternative suggested by CUB for electric avoided energy costs, CUB would support Alternative One: For the purposes of evaluating Focus, avoided electric capacity costs shall be based on the unit costs of a peaker plant.

However, should the Commission elect to not include the cost of intermediate and baseload generation as a component of the avoided electric energy cost, for the reasons noted above, CUB recommends that the Commission adopt Alternative Two: For the purposes of evaluating Focus, avoided electric energy costs shall incorporate the unit costs of a peaker plant and of baseload and intermediate capacity. The EWG shall review available data for determining the appropriate value of baseload and intermediate capacity and report its findings and recommendations to the Commission by November 1, 2018.

### *Natural Gas Avoided Costs*

CUB supports Alternative One: For purposes of evaluating the Focus program, avoided natural gas costs shall continue to be calculated based on EIA forecasts of Henry Hub prices adjusted using Wisconsin City Gate prices and retail prices to estimate avoided natural gas costs in Wisconsin.

Natural gas avoided costs should continue to use EIA forecasts of Henry Hub prices with the adjustments indicated in Alternative One. This alternative uses a long-term forecast of Wisconsin-specific costs, and does so in a transparent manner without the use of potentially costly proprietary modeling approaches.

### *Discount Rate*

CUB supports Alternative Two: Use a discount rate of 0 percent in Focus' cost-effectiveness tests.

The goals of programs such as focus are the reduce both the current cost of utility service, as well as to influence customer behavior so as to avoid future, incremental utility costs. CUB believes that a



societal discount rate of 0% should be used because of the significant benefits that exist to future ratepayers. If the Commission elects not to adopt CUB's preferred alternative, a 2% discount rate would be appropriate.

### *Value of Carbon*

CUB support the continued inclusion of the value of carbon emissions as an avoided cost. The science supporting the treatment of carbon emissions from utility operations as a pollutant has only strengthened since the Commission last set the value of carbon, and increasingly residential customers and businesses of all sizes are considering the cost of carbon in their utility and energy procurement decision. As such, CUB would support any of the three alternatives presented in the Draft Memo. However, given the time that has elapsed since the current \$15.00 per ton value was set, CUB believes that it may be most appropriate to direct the EWG to provide a range of carbon costs, either market based or social cost derived, for Commission consideration.

## **Programs Requiring Funding Allocation Decisions**

### *Renewable Energy Program and Design and Structure*

CUB supports Alternative Three: Determine that this decision should be postponed until the EERD study is completed in September. Direct the Program Administrator to report back by October 31 with alternatives.

CUB acknowledges that postponing a decision on the design and structure of the Focus renewable energy program may shorten the planning time of the Program Administrator, it will eliminate the potential for the Commission to have to reconsider its decision if the results of the study indicate changes are needed. Given that the EERD analysis is currently underway CUB believes that it may be premature to make decisions regarding Renewable Energy Program design and structure until the EERD study is completed.

That being said, it is CUB's understanding that uncertainty regarding the future structure of the renewable energy program has had a negative impact on recent levels of participation. As such, should the Commission determine that the negative impacts to residential customers and Wisconsin businesses, both those in the renewable energy installer industry and those businesses who might seek to invest in renewable energy, associated with postponing a decision outweigh the uncertainties associated with making a decision at this time, CUB would not oppose the other proposed alternatives.

### *Renewable Energy Mid-Size Business Offering*

Consistent with its position on the overall renewable energy program design structure, CUB supports Alternative Three: Determine that this decision should be postponed until the EERD study is completed in September.

### *Renewable Budgets for 2019-2022*

CUB supports Alternative One: Determine that renewable incentive funding shall remain the same as 2018 for the residential and business portfolios.

Cub also supports the additional option associated with this alternative: Allow the Program Administrator the flexibility to adjust budgets between business and residential portfolios and RECIP and prescriptive programs as the market dictates.

Unlike, the previous decision points, CUB believes that it is necessary to set the renewable energy budget at this time. Delaying the decision would impact the Program Administrator's ability to plan for energy efficiency programs, as the budgets for these programs would also not be known until a later date. CUB does not object to a maintenance of the current funding level of approximately \$5.5 million for renewable energy programs. Given that energy efficiency programs have historically been more cost-effective than renewable resource programs, and in light of the current level of overall Focus funding, CUB is not suggesting an increase to the renewables budget over 2018 levels at this time. If increases in the overall Focus budget were pursued and enacted it might then be appropriate to increase

funding for renewables. CUB would support giving the Program Administrator the flexibility to adjust budgets as necessary.

### *Digester Funding*

CUB supports Alternative One, with a modified version of Option B: Direct the interagency workgroup to develop and issue a joint RFP for integrated digester projects, with a budget of \$5 million.

Modified Additional Option B: Develop and issue a joint RFP, if appropriate, after Commission staff has analyzed additional information regarding the BCO award. Any RFP will be returned to the Commission for approval prior to issuance.

The current award of \$15 million to BC Organics (BCO) represents a substantial part of the overall digester program budget, and substantial single award in an of itself. CUB has reservations, about awarding additional funding under the digester program without additional information regarding the performance of BCO.

### *Rural Program*

CUB supports Alternative Two: Determine that rural programs can be folded into core Focus program offerings and track rural participation going forward as a contract goal/performance measure.

CUB believes that it is appropriate to fold the rural programs into the core Focus programs. However, given the newness of the programs, we have concerns that there is insufficient information at this time to set a floor. However, should the Commission elect to set a floor, CUB asks that the decision on the exact floor amount be set at a later date, after additional information regarding rural programs can be obtained.

## **Focus-Utility Collaboration Issues: Behavioral Programs, Accessibility of Data, and Utility Voluntary Programs**

### *General Framework for Focus and Utility Collaboration*

CUB supports a modified version of Alternative Three: A formal framework for enhanced collaboration between Focus, utilities, and stakeholder groups designated by the Commission shall be established, with fully revised guidance for Commission review. By September 30, 2018, Commission staff shall provide a report to the Commission on alternatives for defining the purposes, structure and design of a collaborative framework, at which time the Commission will make a final decision on the design of the framework.

CUB is supportive of greater collaboration and coordination between Focus and utilities. As such, CUB support the establishment of a formal framework for enhancing such coordinated efforts. However, CUB notes that the Draft Memo appears to only contemplate a collaborative framework that includes Focus and utilities. While certainly, utilities should be involved in developing any guidance as they best know the limitations within each of their organizations, CUB believes that it would also be appropriate to include customer organizations, such as CUB, and possibly other intervenor organizations, in the collaboration. As such, CUB asks that the Commission require that Commission staff work with the utilities, Focus, and other parties designated by the Commission to develop the collaboration guidance.

CUB would note that any resourced allocated to collaborative programs would, by necessity, mean that fewer resources would exist for traditional Focus administered programs. As such there exists the potential for equity issues to arise in the course of implementing any behavioral programs, should some utilities be unwilling to participate in collaborative efforts with Focus, or participate at a significantly greater or lesser level than their utility peers, resulting in an inequitable overall allocation of the Focus budget between the utility service territories. CUB recommends that Commission staff and Focus monitor the impact that collaborative programs have on the allocation of Focus resources across the

different utilities, and report back to the Commission should significant equity issues to arise if behavioral programs on an individual utility basis are included in Focus offerings.

### *Behavioral Programs*

CUB supports Alternative One: Behavioral programs shall be developed and implemented in connection with the framework for enhanced collaboration between Focus and utilities described in this memorandum.

CUB believes that there is significant potential for behavioral programs to contribute to energy efficiency and conservation savings. However, as a general position, CUB believes that the Program Administrator should be provided with flexibility regarding the implementation behavioral programs, rather than taking a prescriptive approach, as CUB believes that this is more likely to produce positive outcomes. Consistent with this position, CUB asks that the Program Administrator be strongly encouraged to develop and implement behavioral program but would leave to the Program Administrator's discretion to determine if behavioral programs will be implemented. If the Program Administrator chooses to implement behavioral programs, CUB believes that the programs should be developed and implemented in connection with the framework for enhanced collaboration discussed previously.

### *Accessibility of Data from Participating Utilities*

CUB supports a modified version of Alternative Two: Direct Commission staff to work with utility staff, Focus staff, and other parties designated by the Commission, to identify opportunities to expand Focus access to utility data when that access can be achieved at reasonable cost.

CUB believes that enhanced utility data accessibility holds great potential for enhancing Focus programs. However, as noted in the Draft Memo, a number of considerations must be addressed in this area. CUB supports the establishment and use of a formal framework as the primary forum for addressing data access issues. But, CUB additionally suggests that it may not be appropriate to leverage the same

collaborative framework discussed previously for data access issues as the utility staff most knowledgeable regarding data issues are not likely to be the same staff involved in the collaborative framework. As with the collaborative framework, the Draft Memo does not appear to contemplate the participation by consumer groups, or other outside parties in any of the data accessibility alternatives. CUB asks that, if the Commission elects to establish a framework for data access issues, that outside parties, such as CUB, as designated by the Commission, be included in the framework process.

### *Utility Voluntary Programs*

CUB supports Alternative Two: Direct Commission staff to conduct further analysis on the benefits, financial costs, and other barriers associated with incorporating utility voluntary programs into a collaborative framework and report its findings and recommendations to the Commission by November 1, 2018.

CUB believes that it may be premature to require that utility voluntary programs be developed and implemented in connection with the framework for enhanced collaboration, especially if the Commission does not determine the guidance for the collaboration at this time.

### *Voluntary Program Guidance*

CUB proposes an additional alternative: Direct Commission staff work with Focus staff and interested third parties to develop guidance defining appropriate voluntary programs, to be brought back before the Commission for consideration.

CUB believes that the discussion surrounding voluntary programs in the Draft Memo adequately serves as a foundation for the establishment of guidance by the Commission at this time. For example, the Draft Memo does not address the need for the programs to complement, or at least not conflict with, Focus programs. CUB suggests that Commission staff work with Focus staff and interested third parties to develop more complete guidance to bring back to the Commission.

## **Issues Related to Setting Energy Goals**

### *Savings Goals*

CUB supports Alternative One: Establish an overall energy savings goal. Minimum kWh and therm thresholds will be set equal to 90 percent of the overall goal.

CUB does not see any reason to discontinue the use of overall savings and minimum thresholds. However, CUB does not believe that the current Program Administrator has effectively leveraged the flexibility provided by establishing an overall savings goal and minimum kWh and therm thresholds to achieve higher savings. Rather than exercise the flexibility between kWh and therm savings as a tool for ex-ante program design and implementation, it is CUB's understanding that the Program Administrator has primarily used the flexibility granted in the savings goals to backfill shortfalls in anticipated savings. While, CUB sees no reason to eliminate the flexibility provided by the current structure, CUB requests that Commission staff work with the Program Administrator to ensure that the Program administrator maximizes the program planning benefits afforded by flexibility in the kWh and therm savings goals.

### *Contract Goals*

CUB supports Alternative Two: Commission goals shall be set based on net life cycle savings and the Program Administrator's goals shall be set based on gross life cycle savings.

CUB believes it is appropriate that the Commission goals and Program Administrator goals should both be set on a life-cycle basis. This is consistent with the savings used to determine cost-effectiveness. However, because of the difficulty in controlling for free-ridership, it CUB believes that it is appropriate for Program Administrator goals be set on a gross basis while Commission goals should be on a net basis.

## **III. Conclusion**

CUB appreciates the opportunity to provide comments on the Draft Memo, and requests that the Commission adopt CUB's suggested alternatives.

Dated this 13th day of April, 2018.

Respectfully submitted,

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